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KNORR-BREMSE System für Schienenfahrzeuge GmbH

CLAIMS:

1. Brake device having an actuator (1), which is operated by a pressure medium, for the application and release of a vehicle brake (2), particularly of a rail vehicle brake, containing an adjusting piston (6) which is displaceable within a brake cylinder (4) and which bounds pressure chambers (12, 14) by means of piston sides facing away from one another, of which pressure chambers (12, 14), one pressure chamber (12) acts upon the vehicle brake (2) in the application position, and the other pressure chamber (14) acts upon the vehicle brake (2) in the release position, the two pressure chambers (12, 14) being mutually connected by a line (26) having an overflow valve (28), which is opened at least during a portion of a transition phase between the application position and the release position and is otherwise closed, characterized in that, furthermore, the overflow valve (28) is opened at least during a portion of a transition phase between the release position and the application position and is otherwise closed, the overflow valve (28) being opened until essentially a pressure balance exists between the two pressure

AMENDED PAGE

chambers (12, 14), and ventilation and bleeder valves (16, 18, 20, 22) being provided for the ventilating and bleeding of the two pressure chambers (12, 14), which are closed during the opening time of the overflow valve (28), and a pressure buildup or pressure reduction exceeding the pressure balance in the two pressure chambers taking place by opening or closing the ventilation and bleeder valves (16, 18, 20, 22).

2. Brake device according to Claim 1, characterized in that the adjusting piston (6) is spring-loaded in the direction of the application position.

3. Brake device according to Claim 1 or 2, characterized in that the overflow valve (28) is opened until a fraction of a maximally achievable braking force or releasing force is generated.

AMENDED PAGE